

**REMARKS**

Reconsideration and allowance of the above-referenced application are respectfully requested.

**I. STATUS OF THE CLAIMS**

None of the claims are amended herein.

In view of the above, it is respectfully submitted that claims 1-49 are currently pending and under consideration in the present application.

**II. REJECTION OF CLAIMS 1-49 UNDER 35 U.S.C. § 103(A) AS BEING UNPATENTABLE OVER YOSHIMURA (USP# 5,793,917) IN VIEW OF SUZUKI ET AL. (USP# 5,629,795)**

Yoshimura teaches that an optical signal undergoes both positive and negative dispersion while traveling the length of a fiber. However, Yoshimura fails to teach the claimed method for repairing a transmission line as recited in claim 1 of the present invention. Moreover, Yoshimura does not disclose the method of inserting a third fiber in a section comprising a first fiber having a positive dispersion with respect to wavelength transmitted through the section and a second fiber having a negative dispersion with respect to wavelength transmitted through the section, wherein the third fiber has an absolute value of dispersion per unit of length smaller than the absolute value of dispersion per unit of length of the first and the second fibers (see claim 1).

In the Advisory Action mailed on October 7, 2004, the Examiner asserts, "the prior art disclose[s] positive and negative dispersion..., the fact that the applicant claims to repair the line with sections of fiber that exhibit the same properties as the prior art is not patentable over the prior art." The Examiner, however, fails to show where the claimed features of the present invention are taught by the cited prior art references.

Yoshimura does not teach or suggest that a section of the optical cable 103 between the intervals of the optical repeaters 105a-105n, includes a fiber having a positive dispersion with respect to wavelength transmitted through the section and a fiber having a negative dispersion with respect to wavelength transmitted through the section, like the transmission line recited in claim 1 of the present invention. Like the teachings of Yoshimura, Suzuki does not teach or suggest that a section of the optical fiber 2 between intervals of the optical repeaters 3 includes a fiber having a positive dispersion with respect to wavelength transmitted through the section

and a fiber having a negative dispersion with respect to wavelength transmitted through the section like the transmission line recited in claim 1 of the present invention.

Suzuki teaches, "the optical fiber 2 is about 9000km long, the average zero dispersion wavelength is 1555 nm, shorter than the wavelength of the light wave signal, and the average wavelength dispersion value at the signal wavelength is 0.2 ps/km/nm. To compensate for losses of the optical fibers, there are disposed 300 optical amplifying repeaters 3 at intervals of around 30 km" (emphasis added, see column 6, line 16-22).

Suzuki also teaches, "the dispersion media 4 are each formed by a 600-m long, dispersion compensating fiber (zero dispersion wavelength: 2400nm) which has a wavelength dispersion value of -50 ps/km/nm to cancel a positive accumulated wavelength dispersion of 36 ps/nm for a 180-km long portion of the optical fiber" (emphasis added, see column 6, line 42-48).

The average wavelength dispersion value at signal wavelength for the dispersion media 4 is bigger than that of the optical fiber 2. In the present invention, "the third fiber has an absolute value of dispersion per unit of length smaller than an absolute value of dispersion per unit of length of the first and second fibers" (emphasis added, see claim 1).

It is submitted that, Yoshimura and Suzuki, either alone or in combination, do not teach or suggest the method of repairing a transmission line in which a third fiber is inserted in a section of the transmission line that comprises a first fiber having a positive dispersion with respect to wavelength transmitted through the section and a second fiber having a negative dispersion with respect to wavelength transmitted through the section, wherein the third fiber has an absolute value of dispersion per unit of length smaller than the absolute value of dispersion per unit of length of the first and the second fibers (see claim 1).

Claims 11, 20, 29, 42, 46 and 47 relate to patentably distinguishing features similar to those recited in claim 1, and therefore, distinguish over the prior art for at least the same reasons as those regarding claim 1.

Claims 2-10, 12-19, 21-28, 30-41, 43-45 and 48-49 depend from claims 1, 11, 20, 29, 42 and 47, respectively. For at least the reason that claims 1, 11, 20, 29, 42 and 47 distinguish over the prior art, it is respectfully submitted that claims 2-10, 12-19, 21-28, 30-41, 43-45, 48 and 49 also distinguish over the prior art.

In view of the above, it is respectfully submitted that the rejection is overcome.

### III. CONCLUSION

In view of the foregoing remarks, it is respectfully submitted that each of the claims patentably distinguishes over the prior art, and therefore defines allowable subject matter. A prompt and favorable reconsideration of the rejection along with an indication of allowability of all pending claims are therefore respectfully requested.

If there are any additional fees associated with filing of this Response, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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